


Environmental Quality
DESIGN, INSTALLATION AND UTILIZATION OF
FIXED-FENCELINE SAMPLE COLLECTION
AND MONITORING SYSTEMS

- 1. Purpose.** This Engineering Manual (EM) provides air monitoring guidance for designing and conducting real-time, fixed-fenceline air quality monitoring programs for site investigation and remediation projects. Specifically, the Manual addresses the selection, set-up, and operation of sampling and analytical equipment, data management, and quality assurance/quality control (QA/QC). Guidance for developing sampling and analysis plans and standard operating procedures is also presented.
- 2. Applicability.** This EM applies to all USACE Commands having responsibility for hazardous, toxic, and radioactive waste (HTRW) projects.
- 3. References.** References are presented in Appendix A.
- 4. Distribution Statement.** Approved for public release distribution unlimited.
- 5. Discussion.** This EM provides details for the development and implementation of a real-time, fixed-fenceline monitoring system (FFMS) for the collection and measurement of both background and fenceline migration of onsite generated volatile air contaminants. The EM addresses the sample collection design requirements based on site environment, site specific contaminants, and the data quality objectives (DQOs) established for the monitoring. Management and technical personnel can use this EM to provide scope and contract language as well as oversight direction for the actual installation and operation of such fenceline monitoring systems. This EM addresses requirements for a perimeter air monitoring program during site investigation, feasibility studies, and remedial actions.

FOR THE COMMANDER:


OTIS WILLIAMS
Colonel, Corps of Engineers
Chief of Staff

7 Appendices
App A - References
App B - Acronyms & Definitions
App C - Guideline SOPs
App D - Technical Source Listing
App E - Conversion Factors
App F - Equipment Listing
App G - Target Compound List



Printed on Recycled Paper